

# NOAA's Climate Portal

## *Technical Steps to a Successful Deployment*

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**Presentation to the ESIP Federation**

January 7, 2009



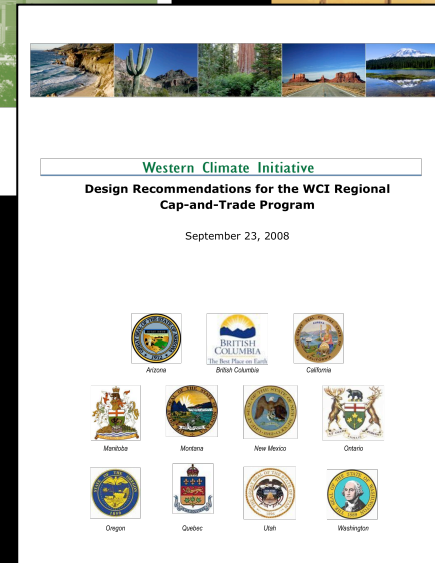
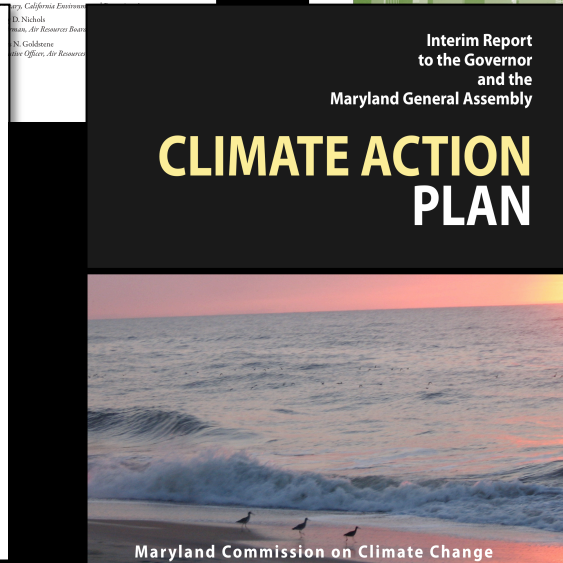
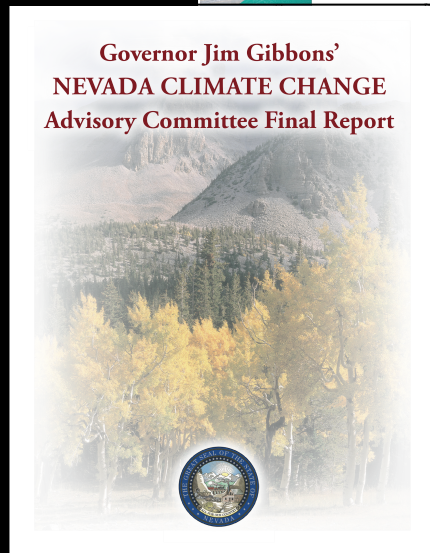
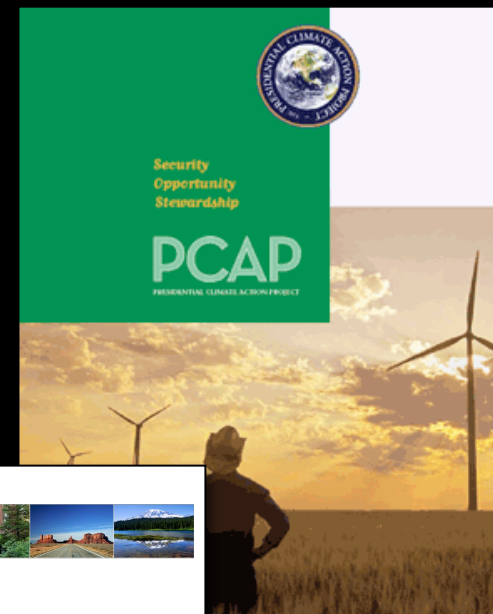
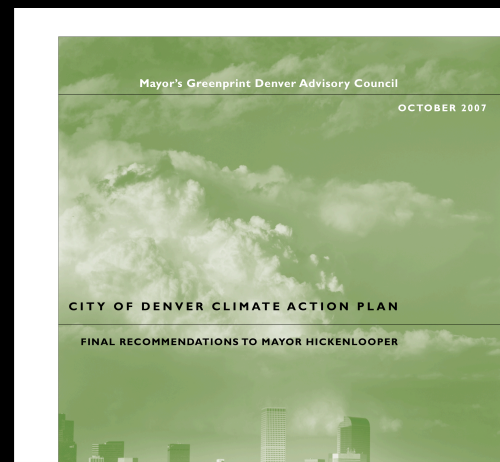
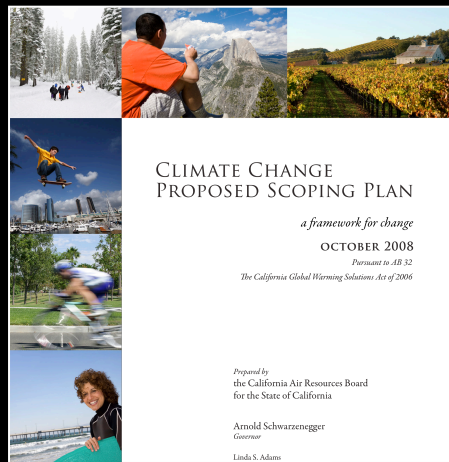
# NOAA Climate Portal Charter

## **BACKGROUND**

- Public demand for climate data, services, and information is growing. Decision makers, business leaders, scientists, educators, and concerned citizens are all expressing a need for more timely data and resources to help them make more informed decisions in their lives and livelihoods.
- Thus, NOAA sees an increasing need to manage and distribute climate information in a more effective, efficient, customer-focused manner.
- The rapid evolution of Web technologies coupled with the migration of user communities on-line seeking climate resources underscore the need for a comprehensive new NOAA climate data and services Web portal.



# City and state governments developing climate action plans need ready resources



# NOAA Climate Portal Charter

## **GOAL:**

- To develop a one-stop Web portal for discovery and delivery of NOAA's climate information and resources.

## **OBJECTIVES:**

- Enhance the discoverability, accessibility and usability of NOAA climate data, products, and services
- Enhance interoperability and leveraging of software products
- Implement appropriate metadata standards and requirements for climate data and products
- Promote a user-focused view of climate data and a consistent delivery of Web-based climate services across NOAA

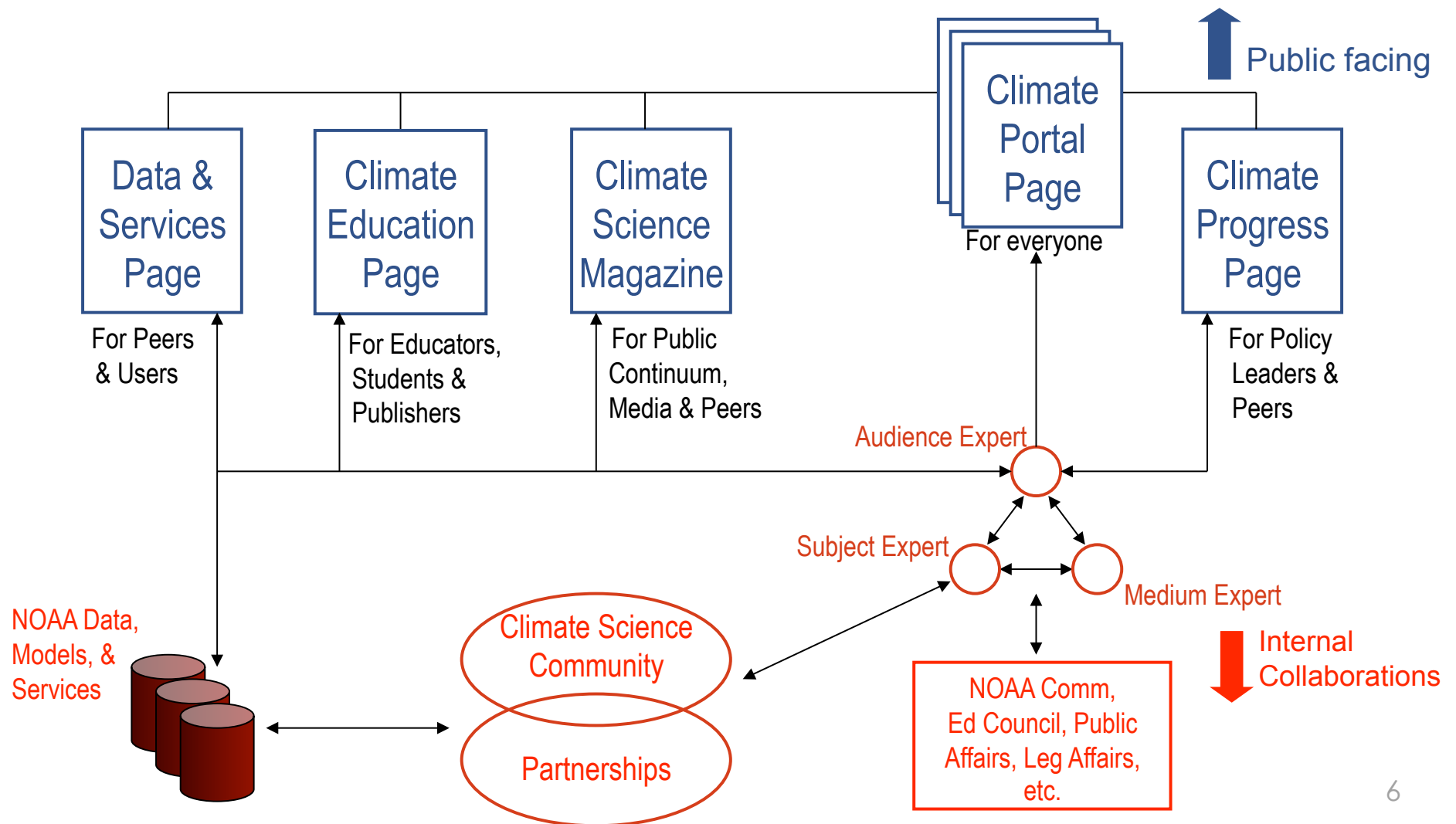
# NOAA Climate Portal Charter

## VISION

- In the climate context, NOAA's role is to be an **authoritative** and **credible** source of climate data and services for science and society, and an **honest broker** in its assessments of the state of the climate system and forecasts of its future.
- To succeed in this vision, NOAA's supporting labs, centers, and partners must work collaboratively and the Portal will serve as a primary, unifying focal point.
  - Existing Web interfaces across NOAA will continue to evolve in concert with the Climate Portal, with increasing seamlessness.
  - One massive, centralized Website to host and serve all datasets and products is not practical nor doable.
  - Think: **centralized access** for users; **decentralized process** among NOAA personnel for developing & serving products & services.

# Climate Portal Concept

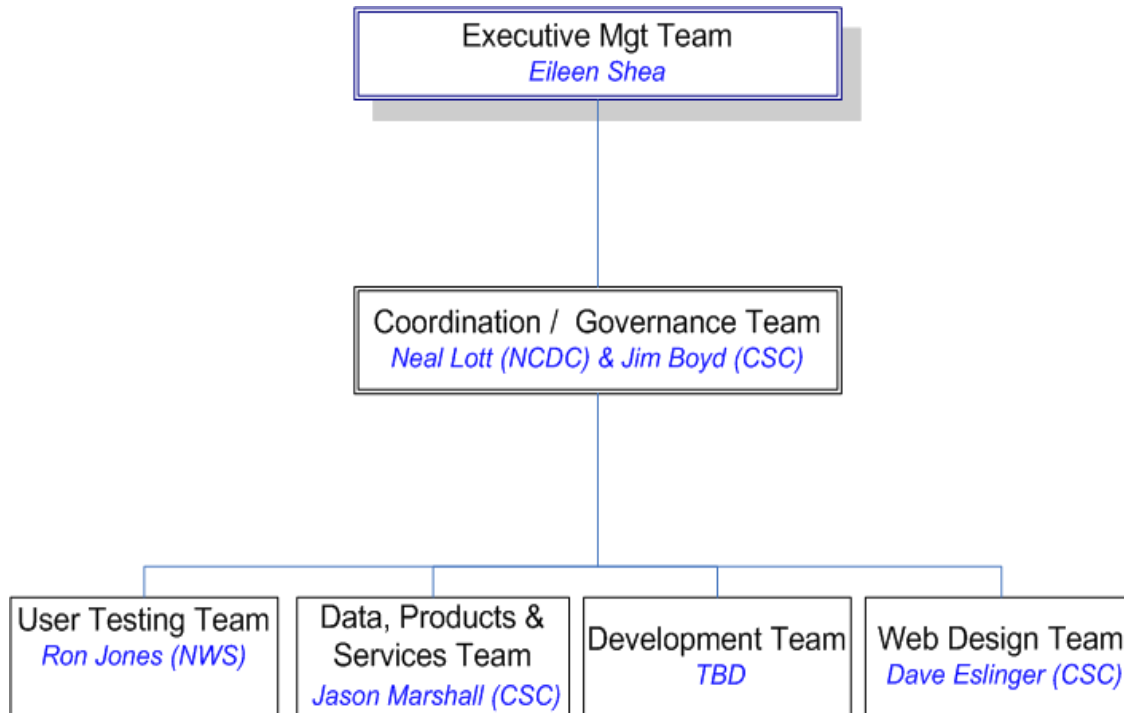
Centralized Access, Decentralized Process





# Program Management

## Project Organization



## Roles & Responsibilities

- **Executive sponsorship**
- **Establish direction & priorities**
- **Approves requirements**
  
- **Oversees technical development**
- **Manages cost, schedule & scope**
- **Resolves cross-cutting issues**
- **Provides routine status to Exec Team & elevates issues as needed**
  
- **Executes WBS (work breakdown structure) tasking**
- **Provides cross-walk with other teams as needed**

# Progress to date

**June '08:** Initial meeting to discuss ideas & interested players

**August '08:** Kickoff workshop in Asheville, NC, to set scope

## **September – November '08:**

- Governance, Design, Data/Metadata & User Testing Team efforts underway
- Core users identified
- Charter completed; concept presented to NOAA CIO Council
- Requirements documents development underway
- Selected for “in-core” funding beginning in FY11

## **December '08:**

- Agreement on prototype design
- Continued work on requirements documents
- Continued development of case studies and user scenarios for prototype

# Deliverables

## **Phase 1 (FY09) Prototype:**

- NOAA Climate Portal Homepage
- Data & Services section
- Climate Science magazine
- FGDC/ISO-compliant metadata for data / products
- Technical documentation sufficient to manage and evolve the initial version of the portal into the future
- Tests designed & implemented for both internal “tire kicking” and external user feedback
- Targeting public rollout (upon approval) in September '09

## **Phase 2 (FY10):**

- Expansion of each section developed in Phase 1 with added datasets, products, and services
- Development of Education and Climate Science Progress sections

# Next Steps

- Finalize and baseline portal requirements document
- Development Team begins work
- User testing ... ongoing and often!
- Stand up portal infrastructure at NCDC
- Secure FGDC metadata from participating offices for Phase 1 data / products
- Alpha and Beta reviews
- Continue enhancements of functionality and content
- On-line release to public (~ September 2009)



Some very preliminary designs...



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SEARCH

## SECTIONS

Climate Data & Services  
**ClimateWatch Magazine** ▶  
Climate Education  
Climate Science Progress

## RESOURCES

Communities & Sectors  
States & Regions  
Reports & Assessments  
Glossary

## CLIMATE WHERE & WHEN?

City, ST or Zip Code

mm/dd/yyyy

Go

Tell Us What You Think



## Monitoring the Ocean's Carbon Balance

The idea seemed simple enough: the more carbon dioxide that people pumped into the atmosphere by burning fossil fuels, the more the oceans would absorb. Is the ocean's uptake of carbon changing its carbon cycle? After 30 years of observations, NOAA found a surprising answer. [Read more...](#)

## NOAA Improves Historical Hurricane Tracks Dataset

The historical hurricane track dataset now has twice the precision of the previous version, in both time and space. [Read more...](#)

## Climate Change to Bring More Extreme Weather to High Plains?

The summer of 2008 shattered all previous records for the number of days exceeding 100°F. [Read more...](#)

## This Design Features Four Headlines

This blurb describes the fourth item in this stack of recent news articles about NOAA's exciting climate research. [Read more...](#)



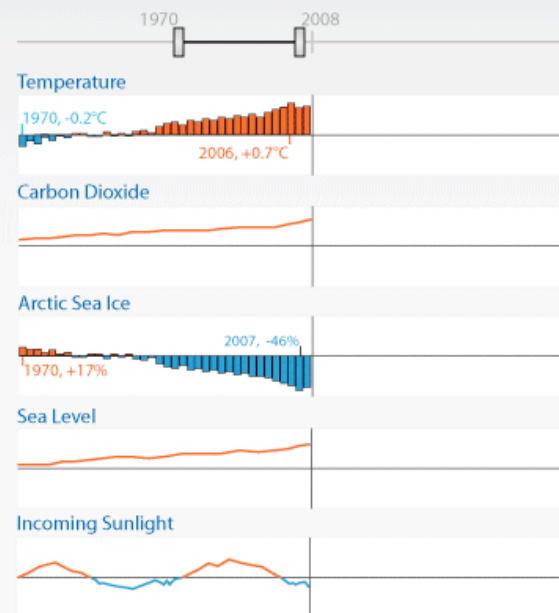
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## ABOUT US

We assess Earth's past and present climate, and forecast its future to help citizens make informed decisions in their lives and livelihoods. [Read more...](#)

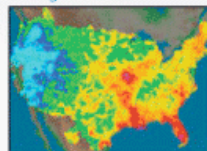
## GLOBAL CLIMATE DASHBOARD



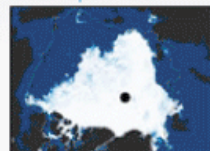
[More Global Climate Variables](#)

## CLIMATE OUTLOOKS & MONITORING

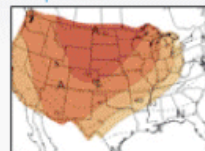
Drought Monitor



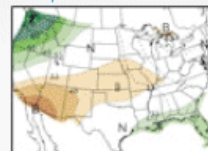
Arctic Report Card



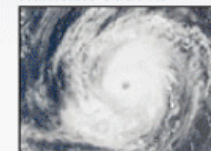
Temperature



Precipitation



Hurricane Outlook



[More Climate Assessments & Outlooks](#)



# NOAA CLIMATE PORTAL

NOAA Climate Portal >> ClimateWatch Magazine

SEARCH

## SECTIONS

Climate Data & Services  
**ClimateWatch Magazine ▶**  
Climate Education  
Climate Science Progress

## TOPICS

Atmosphere  
Energy  
Hazards & Disasters  
Land  
Life  
Ocean  
Sectors & Services  
Snow & Ice

## ARCHIVES

2009  
2008  
2007  
2006  
2005

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About NOAA's Climate Portal



**Severe Drought Hits Western United States**

12-Dec-2008

Full resolution: [JPEG](#) | [KMZ](#) (12.4 MB)



11-Dec-2008

This Header is for  
Yesterday's Image  
and Placed Here



10-Dec-2008

This Header is for the  
Image that is Two  
Days Old Placed Here



9-Dec-2008

This Header is for the  
Image that is Three  
Days Old Placed Here

[View all images](#)

## Feature Articles

## Most Popular

## Editors Recommend

### NOAA Improves Historical Hurricane Tracks Dataset

December 19, 2008

The historical hurricane track dataset now has twice the precision of the previous version, in both time and space. There can be up to four lines of text in these descriptors.



### Climate Change Brings More Extreme Weather to Great Plains

December 2, 2008

The summer of 2008 shattered all previous records for the number of days exceeding 100°F. There can be up to four lines of text in these descriptors, which is 1-2 sentences.



### This is the Third Headline Out of Four Headlines

November 21, 2008

This blurb describes the third item in this stack of recent news articles about NOAA's exciting climate research. There can be up to four lines of text in these descriptors.



[View all articles](#)

## Climate this week

## NOAA News

## Facts and FAQs

## Blogs

## Community Forums

### NOAA Improves Historical Hurricane Tracks Dataset

December 16, 2008

The historical hurricane track dataset now has twice the precision of the previous version, in both time and space. [Read more...](#)

### ▶ U.S. Experiences Fourth-Warmest November On Record

December 11, 2008

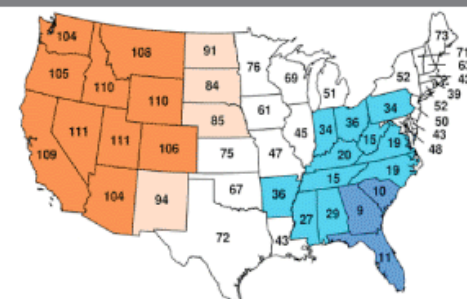
The November 2008 temperature for the contiguous United States was warmer than the long-term average. [Read more...](#)

### This Design Features Three Headlines and this is the Third of Three

December 10, 2008

This blurb describes the third item in this stack of recent news articles about NOAA's fascinating climate research. [Read more...](#)

[View all news releases](#)





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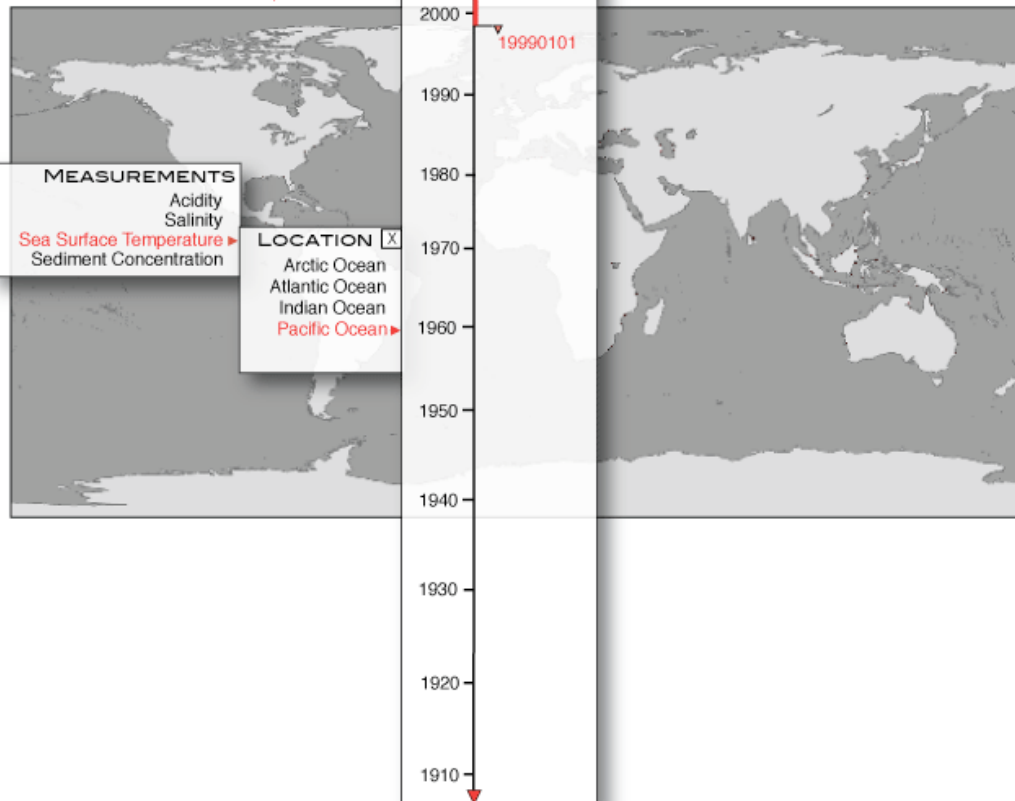
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## BASIC SEARCH

NOAA is a leading provider of climate data and services to the nation and the world. Click above to key in Search terms or, to browse, select from among the Datasets listed below left. Click the "+" button above to display Advanced Search features.

Click to select a Measurement, then click to select a Location and Time Period of interest.







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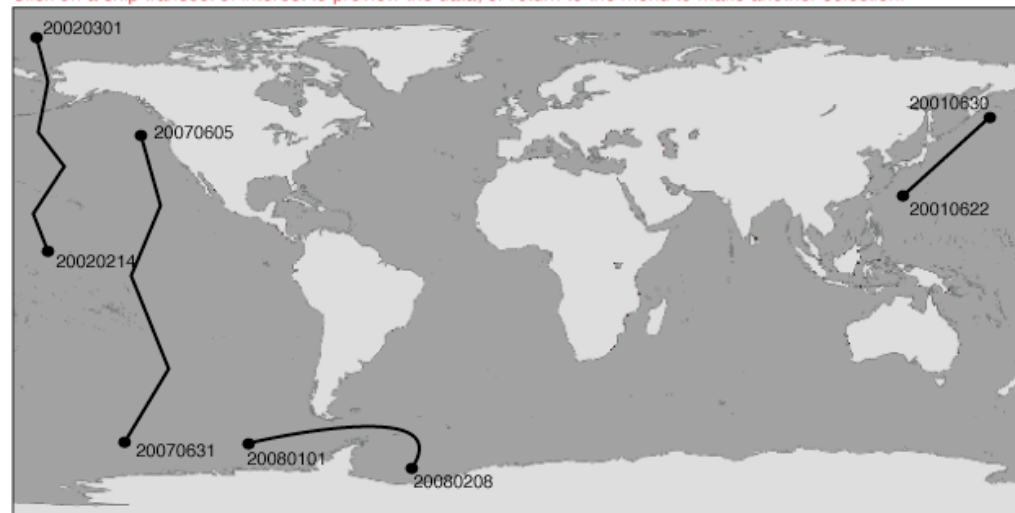
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Click on a ship transect of interest to preview the data; or return to the menu to make another selection.



NOAA HOME WEATHER OCEANS FISHERIES CHARTING SATELLITES CLIMATE RESEARCH COASTS CAREERS



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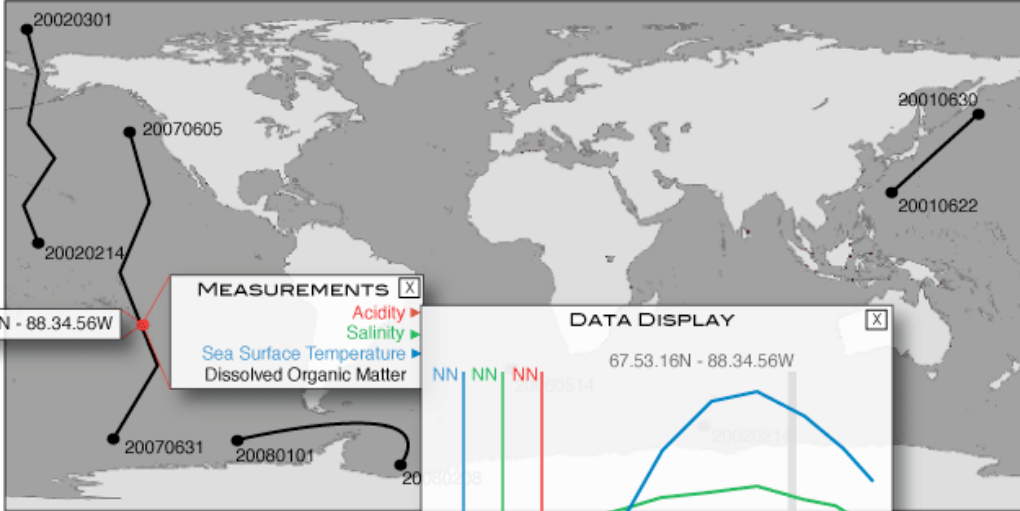
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Click to select Measurements. Click and drag the red dot along the transect to highlight a given location.

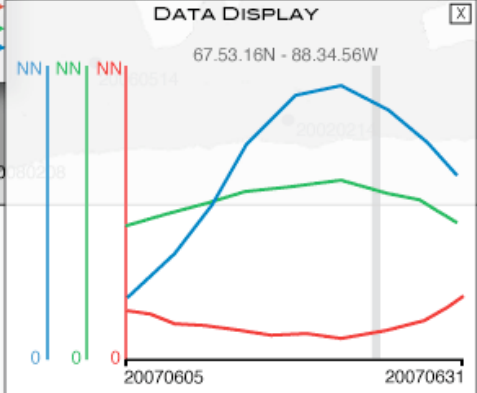


#### MEASUREMENTS

- Acidity ▶
- Salinity ▶
- Sea Surface Temperature ▶
- Dissolved Organic Matter ▶

#### DATA DISPLAY

67.53.16N - 88.34.56W



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